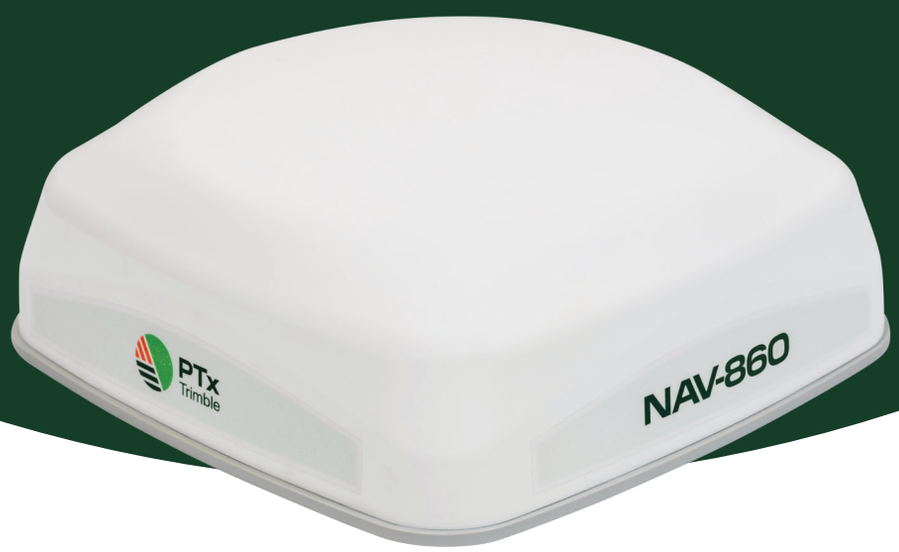
DATASHEET

NAV-860

Guidance Controller

The NAV-860 guidance controller from PTx Trimble provides high performance positioning and guidance paired with excellent accuracy and maximum uptime. Continuing a long tradition of advanced GNSS receivers built for the equipment brands you already own, you can mount this unit on the roof of most agricultural vehicles to provide precision autosteering guidance for years to come.



Key Features

- Full range of correction signals including GPS, GLONASS, Galileo, Beidou and QZSS constellations.
- Built-in Bluetooth® for tethering and device connections.
- Simplified installation and set-up with fewer components.Over 10,000 supported vehicle platforms.
- Combine with GFX series displays and PTx Trimble steering solutions for auto-guidance and precision farming functions.

Accuracy in All Conditions

Featuring a powerful GNSS engine, the NAV-860 tracks every satellite from every major constellation leading to robust performance in all environments as well as fast convergence time for RTK, VRS and Trimble RTX® correction services. Each pass is repeatable too, maximising the effectiveness of your tramlines and controlled traffic paths season after season.

Reliable Durability

Designed from the ground up to deliver accurate positioning across every high, low or obstructed spot on your field in any weather conditions, the NAV-860 guidance controller keeps you running. With a dustproof and waterproof IP66 rating, it easily handles whatever work you throw at it while eliminating costly downtime in the field.

PTx Trimble

ptxtrimble.com

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Guidance Controller

Guidance	
Electric	Autopilot™ Motor Drive Solutions
Guidance Ready	CANBus J1939
Hydraulic	External NavController III Autopilot
Housing & Mechanical	
Housing Material	Low-profile, chemical-resistant polymer casing with UV-resistant paint
Size	8.3 in × 8.3 in × 3.1 in (W × D × H) 213 mm × 213 mm × 80 mm
Weight	1.2 kgs
Mounts	Trimble custom, OEM compatible*, Spar*
Connectors	
To GFX-750™ display	M12 4-pin connector
To External Radio	M12 5-pin connector
For I/O	Deutsch 12-pin connector
Communication and I/O	
Bluetooth	Bluetooth 4.1
Serial Ports	1 TX/RX, 1 TX only
CAN Ports	2
BroadR-Reach	Port: 1
Digital Out	Sonalert
Analogue In	Remote Engage
NIMEA Output	1, 5, 10, Hz
Inertial Measurement Unit (IMU)	
Gyroscope	3-axis, 200 Hz
Accelerometer	3-axis, 200 Hz

Operational Range	
Operating Temperature	-40 °C to +70 °C (-40°F to +158°F)
Storage Temperature	-40 ºC to +85 ºC (-40°F to +185°F)
Humidity	up to 100%, condensing
Ingress Protection	IP66, dustproof, waterproof, IPx9K
GNSS Receiver Specifications	
Constellations	GPS: L1 C/A, L1C, L2E, L2C, L5
	GLONASS: L1 C/A, L1P, L2P, L2 C/A, L3 CDMA
	Galileo: E1, E5A, E5B, E5AltBOC
	BeiDou: B1C, B1I, B2I, B2A
	QZSS: L1 C/A, L2C, L5
Satellite Corrections	Trimble CenterPoint® RTX Fast
	CenterPoint RTX correction service
	Trimble RangePoint® RTX correction service
	SBAS (WAAS, EGNOS, SLAS)
	Trimble xFill® technology
Land-Based Corrections	CenterPoint RTK
	CenterPoint VRS
Correction Formats	CMR+™, sCMR+, sCMR+ with SecureRTK, CMRx, RTCM 3.0, RTCM 3.1, RTCM 3.2, RTCM 3.3
Power	
Power	9 - 16 VDC, 5.5 W 17.5 W with external accessories connected
Output Power	12 VDC, 12 W Maximum current for external radio: 1 A

* optional accessory

Correction Type	Pass to Pass Accuracy	Year-to-Year Repeatability	Convergence
RTK[1, 3]	2.5 cm	2.5 cm	Instant
VRS[1, 3]			
CenterPoint RTX[1, 3]			< 5 min in standard coverage regions for Trimble ProPoint® devices < 2 min in Fast coverage regions for Trimble ProPoint devices < 20 min in standard coverage regions
RangePoint RTX[1, 3]	15 cm	50 cm	< 5 minutes
Uncorrected[2, 3]	30 cm	> 1 metre	Instant

1. 95% 2-dimensional horizontal performance based on repeatable in field measurements.
2. 68% (RMS) 1-dimensional horizontal performance based on repeatable in field measurements.
3. Achievable accuracy and initialisation time may vary based on type and capability of receiver and antenna, user's geographic location, atmospheric activity, GNSS constellation health and availability and level of multipath including obstructions. Pass to Pass measurements are within 15 minutes.

Contact your PTx Trimble Authorised Dealer today

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